



# Battery Motor Programming Instructions



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# Battery Motor Programming Instructions

## 1.0 Overview

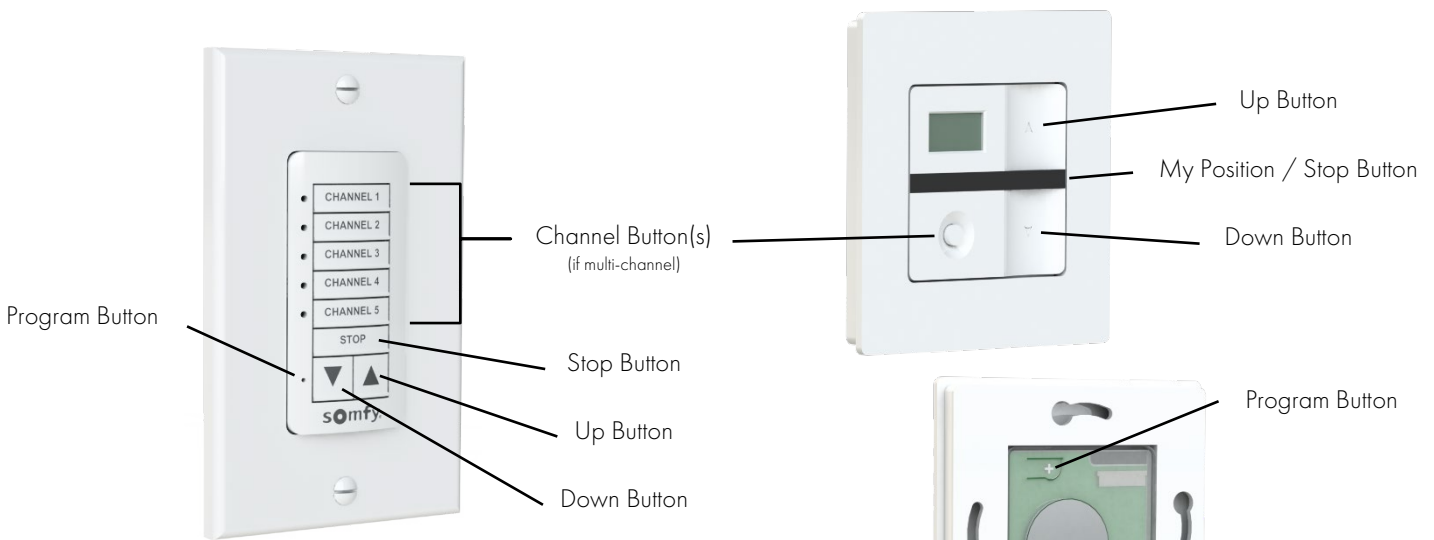
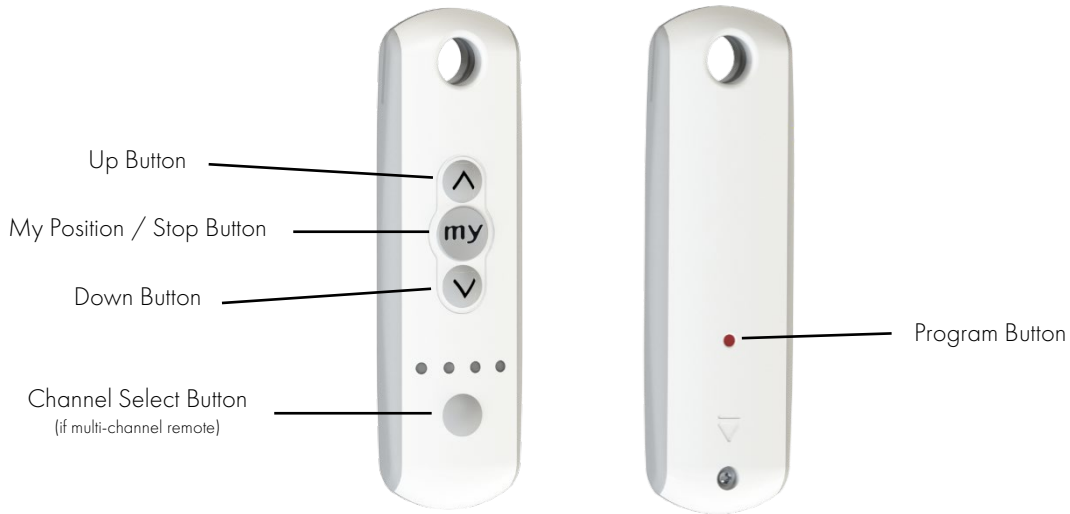
The following programming instructions are for Insolroll's roller shades powered by Somfy's battery motors. These instructions will cover the following motors: BAT-R, BAT-X1, BAT-L1, BAT-L2.

## 1.1 Transmitters

### Hand Held Remotes

Telis 5 channel remote shown below.

All hand-held remotes will have the program button located on the back.



### Decoflex Wireless Wall Switch

Available in 1 Channel & 5 Channel Options

*This transmitter does not have My (Favorite) Position capabilities*

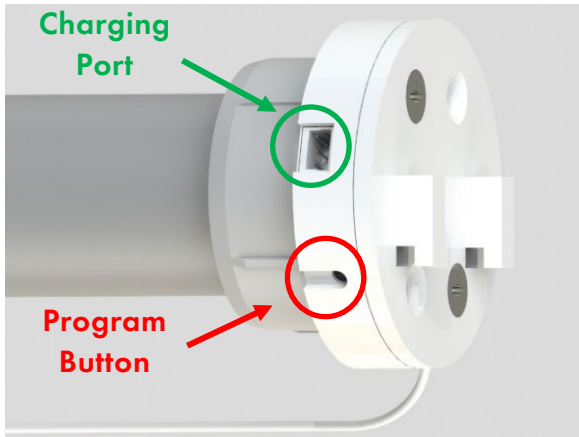
### Simu Surface Mount Wall Switch

Available in 1 Channel & 5 Channel Options



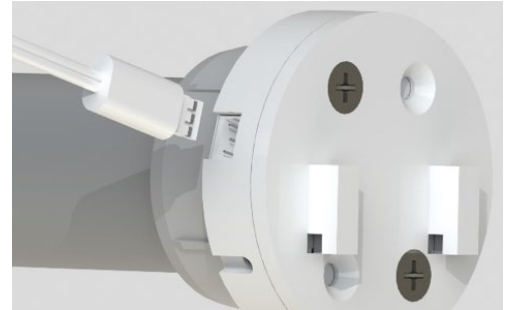
# Battery Motor Programming Instructions

## 1.2 Embedded Li-ion Battery Motor Head



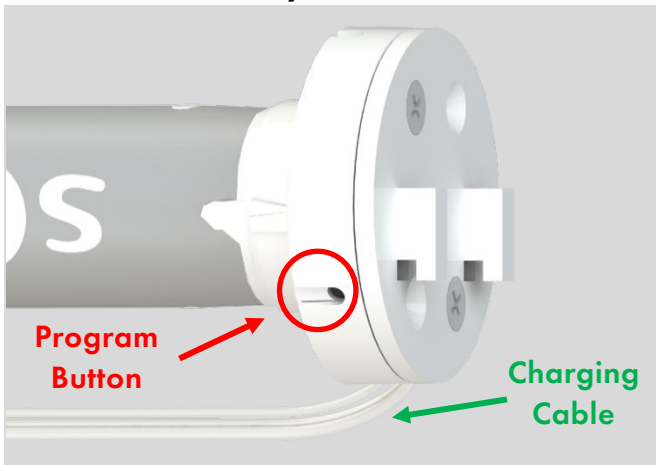
### Cable Orientation

Cable can only be inserted in one orientation (metal contacts must face toward the motor bracket side)



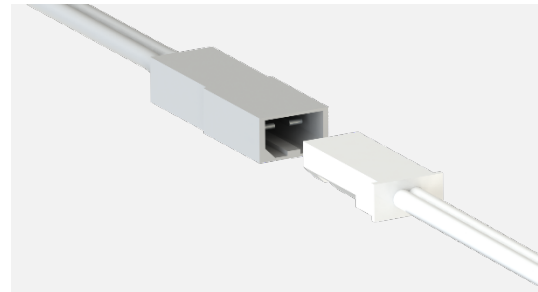
The motor battery is fully charged prior to shipment and the motor is shipped in Deactivate mode.

## 1.3 External Battery Pack Motor Head



### Cable Orientation

The battery pack cable can only be inserted in one orientation (match the geometry of the connectors when connecting the battery pack cable to the motor cable).



The rechargeable battery packs are fully charged prior to shipment and the reloadable battery wands are shipped with eight (8) single-use AA lithium batteries.



# Battery Motor Programming Instructions

## 2.0 Temporary Sleep Mode & Deactivate Mode

The motor must be fully programmed before placing it into these modes. These modes are very useful when programming multiple shades to a single channel. *Think through the programming process for your application before you begin programming any motors.*

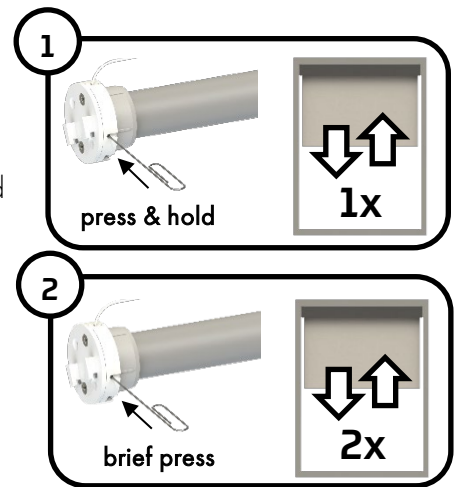
**Temporary sleep mode** will deactivate the shade (it will not respond to any paired transmitters) for 15 minutes, after the 15 minutes it will time out of sleep mode and will respond to any paired transmitters.

**Deactivate mode** will deactivate the shade (it will not respond to any paired transmitters) until it is re-activated. External battery pack motors cannot be placed in Deactivate mode.

### 2.1 Temporary Sleep Mode

Press and hold the **PROGRAM** button on the motor head until the shade jogs up and down one (1) time.

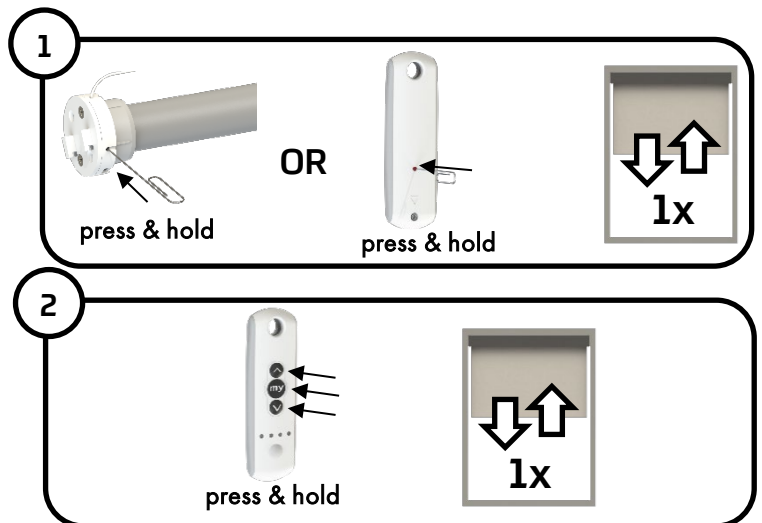
Briefly press the **PROGRAM** button on the motor head. The shade will jog up and down two (2) times and the LED on the motor head will blink green five (5) times to confirm the temporary sleep mode. The orange LED on the motor head will blink one (1) time every second while the motor is in temporary sleep mode. All the paired transmitters will not control the shade. After 15 minutes the shade will jog up and down one (1) time to indicate it is out of sleep mode.



### 2.2 Deactivate Mode

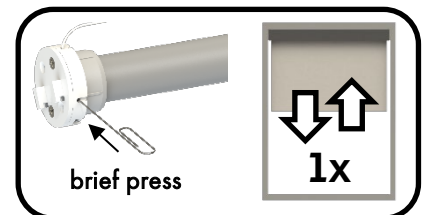
Press and hold the **PROGRAM** button on the motor head or on the paired transmitter until the shade jogs up and down one (1) time. This will place the motor in programming mode.

Press and hold the **UP**, **MY** and **DOWN** buttons simultaneously on the paired transmitter until the shade jogs up and down one (1) time. The LED on the motor head will blink green five (5) times and the motor is now deactivated.



### 2.3 Re-Activating Motors

If you want to re-activate the motor(s) (take the motors out of deactivate mode or out of temporary sleep mode before the 15 minute time out), briefly press the **PROGRAM** button on the motor head. The shade will jog up and down one (1) time and the LED on the motor head will blink green five (5) times. All the previously paired transmitters will now control the shade.

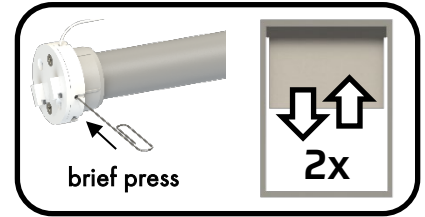


# Battery Motor Programming Instructions

## 3.0 Wake Up Motor

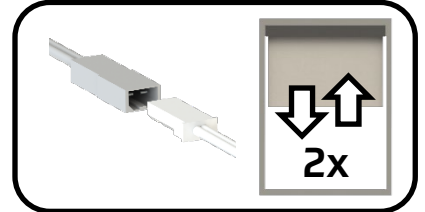
### 3.1 Embedded Li-ion Motors

To wake up the Li-ion embedded motors, briefly and lightly press the PROGRAM button on the motor head using a paper clip. The shade will briefly jog up and down two (2) times and the LED on the motor head will light up orange.



### 3.2 External Battery Pack Motors

To wake up the external battery pack motors, simply connect the battery pack cable into the motor cable. The shade will briefly jog up and down two (2) times and the LED on the motor head will light up orange.

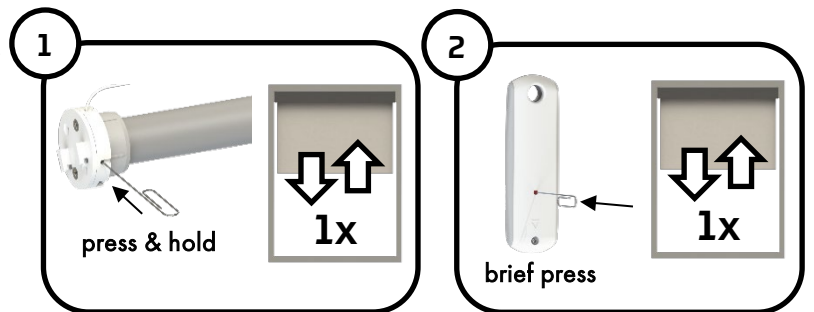


## 4.0 Pair Transmitter to Motor

For multi-channel transmitters: Ensure your transmitter is on the channel you wish the shade to be added to before proceeding.

Press and hold the PROGRAM button on the motor head until the shade briefly jogs up and down one (1) time.

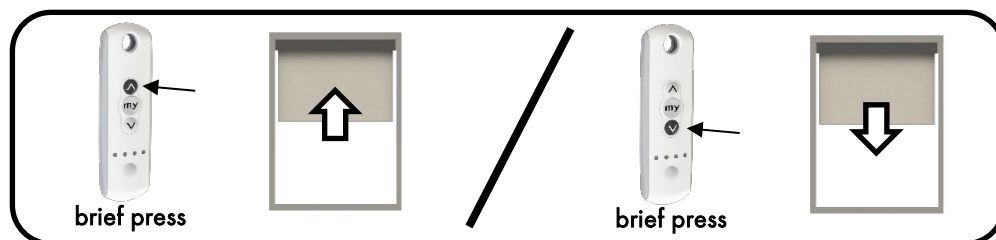
Briefly press the PROGRAM button on the transmitter. The shade will briefly jog up and down one (1) time. The shade is now paired with the selected channel on the transmitter.



## 5.0 Check Shade Operation

Your shade should be shipped with pre-set limits, use the UP and DOWN buttons on the transmitter to verify that the end limits are set to the desired positions.

- If your shade's end limits do not need any adjusting, your shade is completely programmed.
- If your shade moves while the UP or DOWN buttons are pressed and stops when the button is released, skip to section 12.0 Complete Factory Reset.
- If your shade moves to the opposite end limit (Ex. you press the UP button on the transmitter, but the shade moves to the lower end limit), proceed to section 6.0 Modifying Motor Rotation.
- If you need to adjust the end limits, skip to section 7.0 Adjusting End Limits.



# Battery Motor Programming Instructions

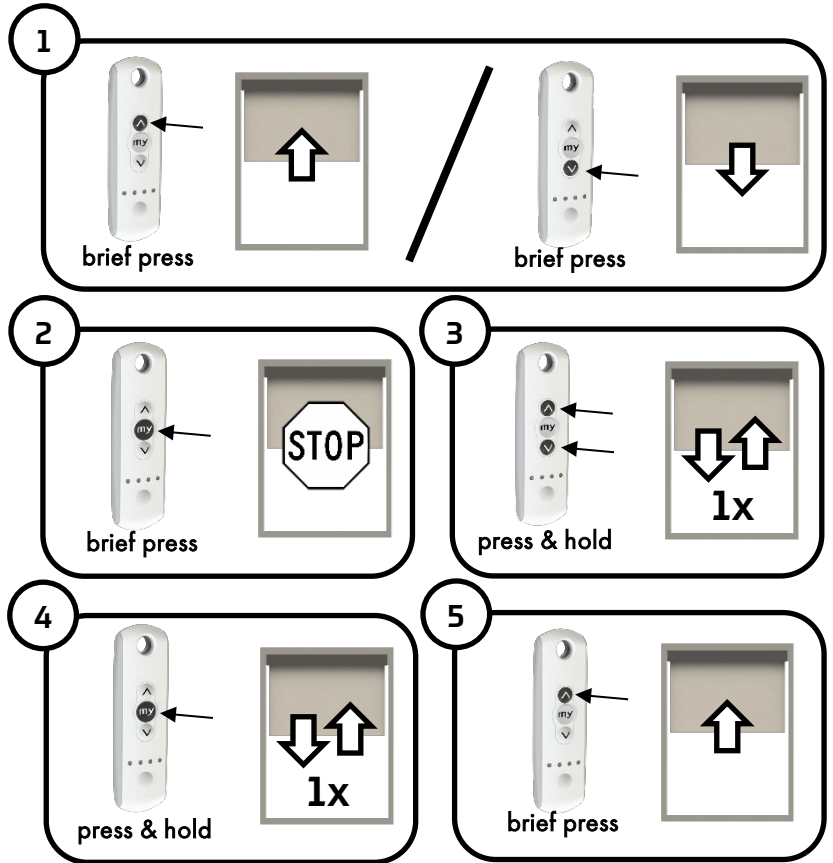
## 6.0 Modifying Motor Rotation

Use the UP or DOWN button on the transmitter to move the shade away from the upper and lower limits. Use the MY button on the transmitter to stop the shade at any position that is not the upper or lower limit.

When the shade stops, press and hold the UP and DOWN buttons on the transmitter simultaneously until the shade jogs up and down one (1) time and the LED on the motor head will blink orange slowly.

Press and hold the MY button on the transmitter until the shade jogs up and down one (1) time and the LED on the motor head will blink green five (5) times.

Press the UP button on the transmitter to check the new rotation direction. If the shade moves in the correct direction, this step is completed. If not, repeat this step.



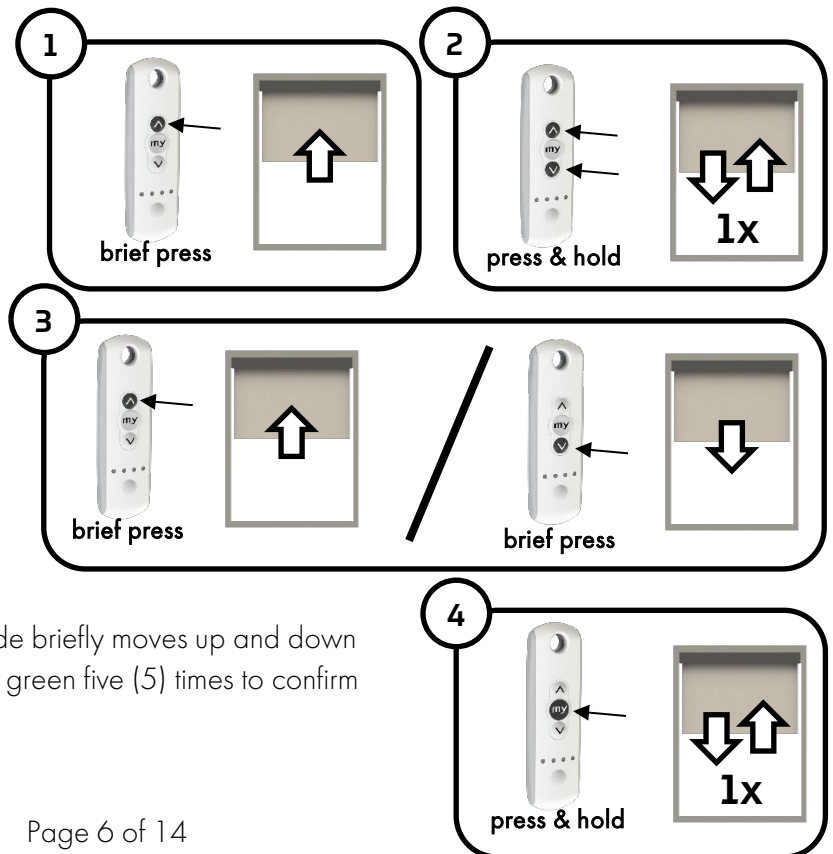
## 7.0 Adjusting End Limits

### 7.1 Adjusting Upper Limit

Briefly press the UP button on the transmitter, the shade will move to the previously set upper limit. When the shade stops at the upper limit, press and hold the UP and DOWN buttons on the transmitter simultaneously until the shade jogs up and down one (1) time.

Use the UP and DOWN buttons on the transmitter to move the shade to the desired new upper limit position. When the shade is at the desired upper limit position, press and

hold the MY button on the transmitter until the shade briefly moves up and down one (1) time. The LED on the motor head will blink green five (5) times to confirm the new upper limit position.



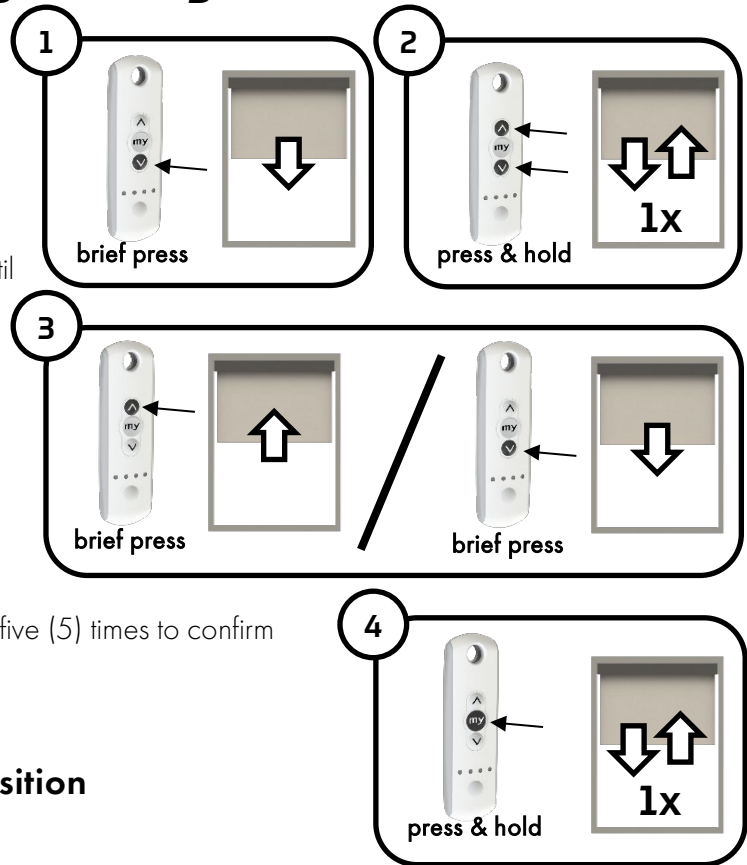
# Battery Motor Programming Instructions

## 7.2 Adjusting Lower Limit

Briefly press the **DOWN** button on the transmitter, the shade will move to the previously set lower limit. When the shade stops at the lower limit, press and hold the **UP** and **DOWN** buttons on the transmitter simultaneously until the shade jogs up and down one (1) time.

Use the **UP** and **DOWN** buttons on the transmitter to move the shade to the desired new lower limit position. When the shade is at the desired lower limit position, press and hold the **MY** button on the transmitter until the shade briefly moves up

down one (1) time. The LED on the motor head will blink five (5) times to confirm the new lower limit position.



## 8.0 Favorite (MY) Position

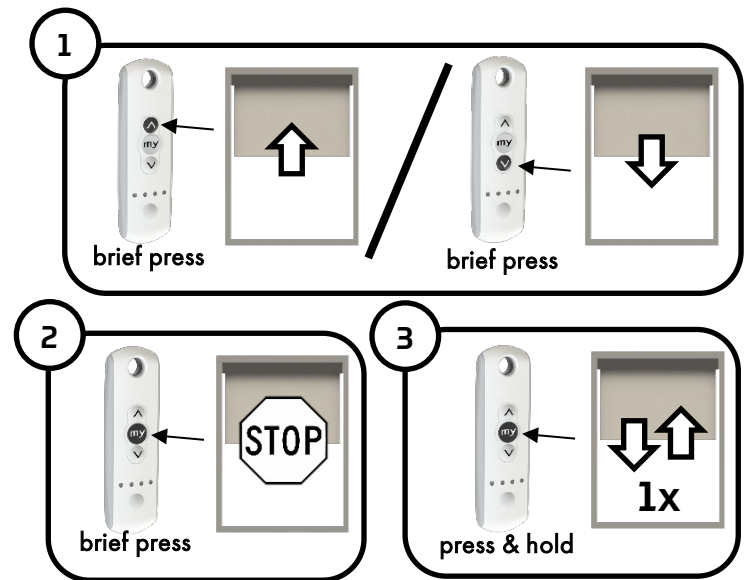
### 8.1 Setting / Modifying / Deleting MY Position

Use the **UP** and **DOWN** buttons on the transmitter to move the shade to the desired favorite position. Briefly press the **MY** button on the transmitter to stop the shade at the desired position.

When the shade is stopped, press and hold the **MY** button on the transmitter until the shade jogs up and down one (1) time to confirm the new favorite (MY) position.

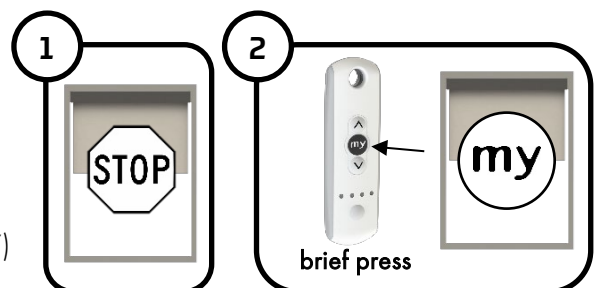
To modify the favorite (MY) position, repeat the process. The newly set favorite (MY) position will replace the old one.

Delete the favorite (MY) position: When the shade is stopped, briefly press the **MY** button on the transmitter to move the shade to the current favorite (MY) position. Allow the shade to move all the way to the favorite (MY) position, then press and hold the **MY** button on the transmitter. The shade will jog up and down one (1) time to confirm the deletion.



### 8.2 Using Favorite (MY) Position

Briefly press the **MY** button on the transmitter when the shade is stationary. The shade will then move to the programmed favorite (MY) position.



# Battery Motor Programming Instructions

## 9.0 Adding/Deleting Channels

### 9.1 Adding Channels

#### Adding a New Transmitter

Transmitter (A) is already paired to the shade.

Transmitter (B) is the new transmitter you want to control the shade.

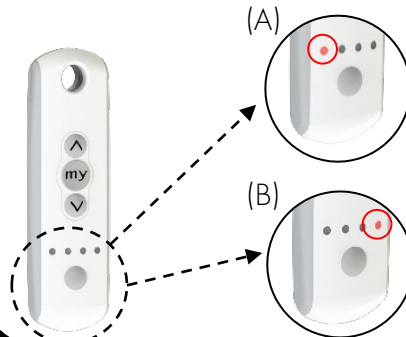


#### Adding a New Channel

Both (A) and (B) are on the same transmitter.

Channel (A) is the channel that is already paired to the shade.

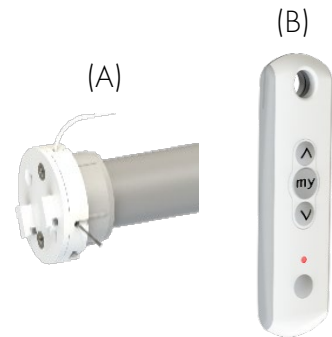
Channel (B) is the new channel you want to control the shade.



#### Using Motor Head to Add a New Transmitter

Motor head (A) is the motor of the shade.

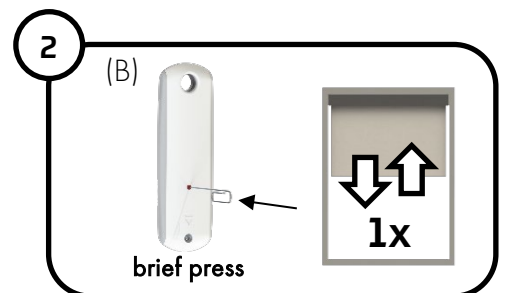
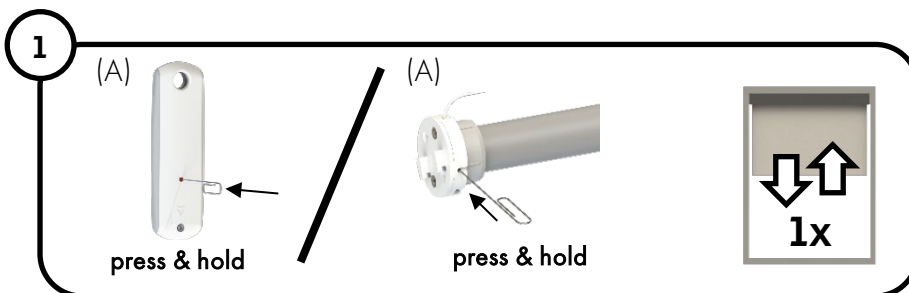
Transmitter (B) is the new transmitter you want to control the shade.



**Using (A) that has been previously paired to the shade or is the motor head of the shade and the new (B) that is being added to control the shade.**

Press and hold the **PROGRAM** button on (A) until the shade jogs up and down one (1) time. The motor is now searching for a new transmitter to add.

Briefly press the **PROGRAM** button on the back of (B). The shade will jog up and down one (1) time and (B) is now paired.





# Battery Motor Programming Instructions

## 9.2 Deleting Channels

### Deleting a Transmitter

Transmitter (A) is the transmitter you want to stay paired to the shade.

Transmitter (B) is the transmitter you want to delete from the shade.

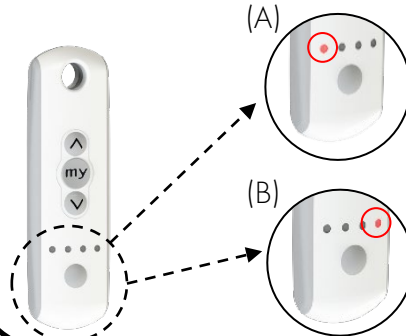


### Deleting a Channel

Both (A) and (B) are on the same transmitter.

Channel (A) is the channel you want to stay paired to the shade.

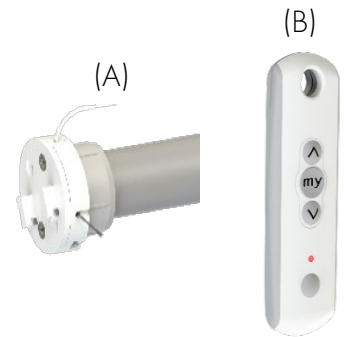
Channel (B) is the channel you want to delete from the shade.



### Using Motor Head to Delete a Transmitter

Motor head (A) is the motor of the shade.

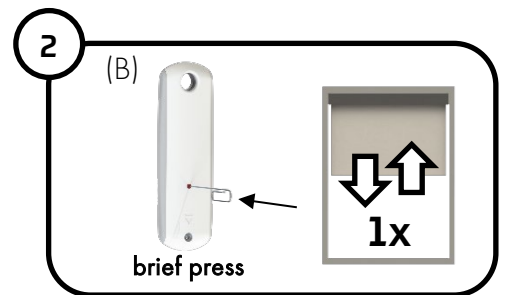
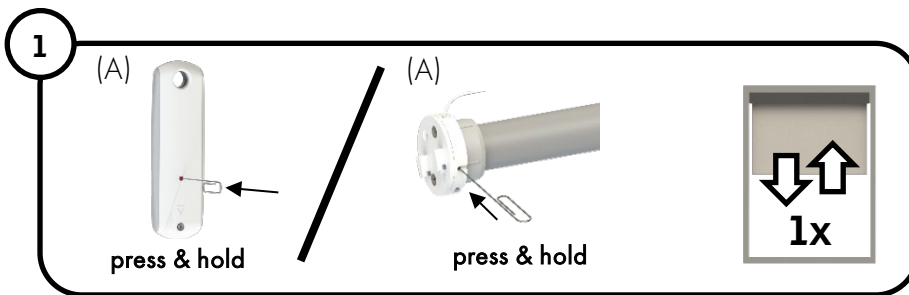
Transmitter (B) is the transmitter you want to delete from the shade.



**Using (A) that has been previously paired to the shade or is the motor head of the shade and (B) that is also paired to the shade, but needs to be deleted.**

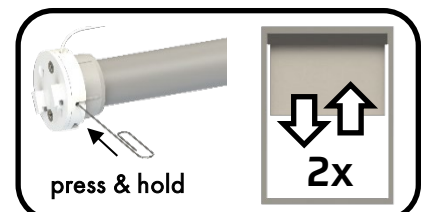
Press and hold the PROGRAM button on (A) until the shade jogs up and down one (1) time.

Briefly press the PROGRAM button on the back of (B). The shade will jog up and down one (1) time and (B) is now deleted.



## 9.3 Deleting All Channels from Motor Memory

To delete all of the paired transmitters, press and hold the PROGRAM button on the motor head until the shade jogs up and down two (2) times. All the paired transmitters are deleted and the LED on the motor head will blink green five (5) times.



# Battery Motor Programming Instructions

## 10.0 Fabric Telescope Adjustments

Fabric telescoping is excessive horizontal movement of fabric while shade rolls up on the tube. Shades are tested and fabric telescoping is adjusted prior to shipment, but additional adjustments may be required depending on each specific application.

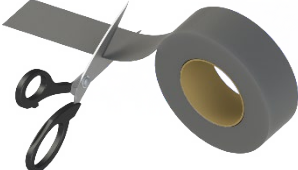
If fabric adjustments are required, roll the shade all the way down so the tube is exposed (this will require adjustment of the lower limit using section 7.2 **Adjusting Lower Limit**).

Place a piece of duct tape, 2"-4" in length, near the edge of the tube on the side opposite of the direction the fabric is moving.

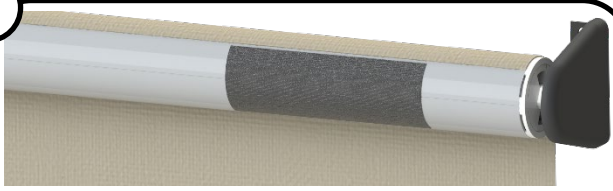
Run the shade up and down a few times. If the shade still telescopes, repeat the process. The correct amount of tape can only be determined by trial and error. Re-set the lower limit after completing shade adjustments.

- 1**

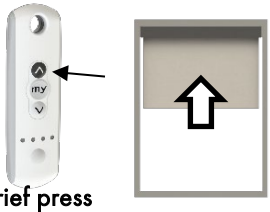
Reset the lower limit using section 7.2 to expose the metal roller tube.
- 2**



Cut a 2" - 4" piece of duct tape
- 3**



Place tape near the edge of the roller tube.  
(on the side opposite of the direction the fabric is moving)
- 4**



brief press
- 5**

Repeat as needed until the telescoping is fixed. Re-set the lower limit to the desired height using section 7.2.

# Battery Motor Programming Instructions

## 11.0 Adjusting Motor Speed

Insolroll does not recommend adjusting the motor speed for most projects. Changing the speed of the motor will change the pitch/tone of the motor.

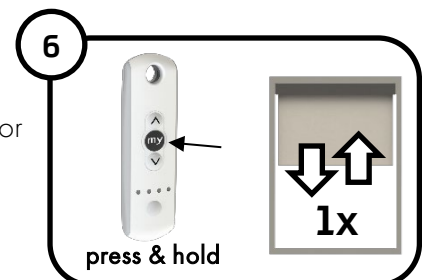
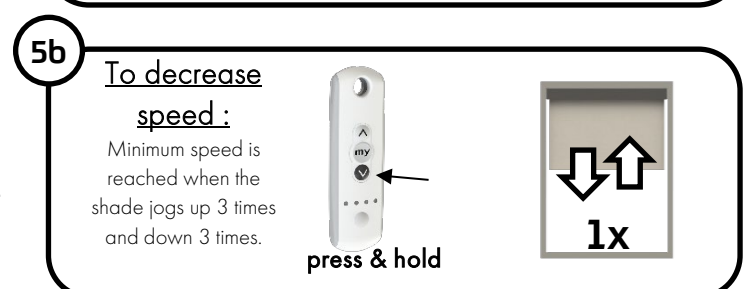
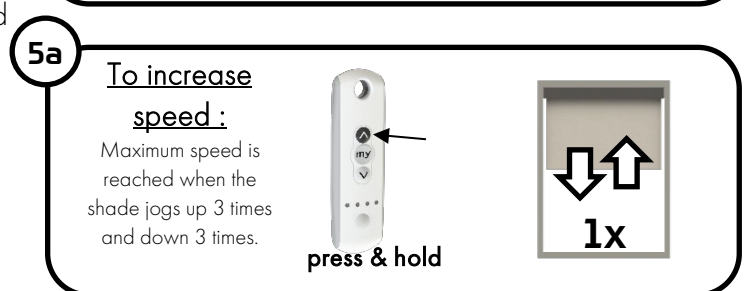
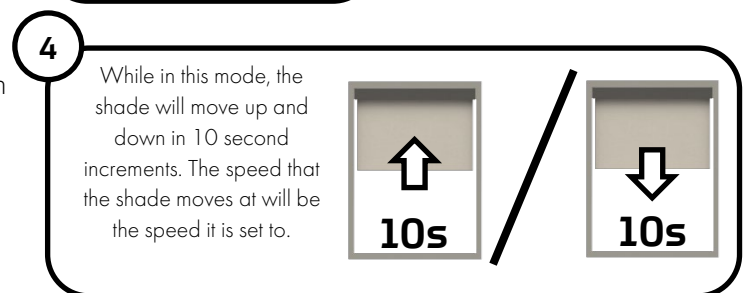
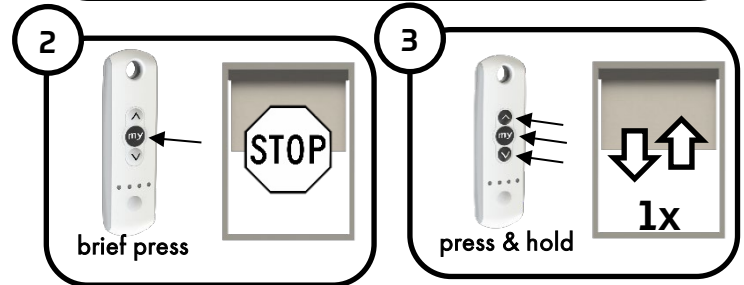
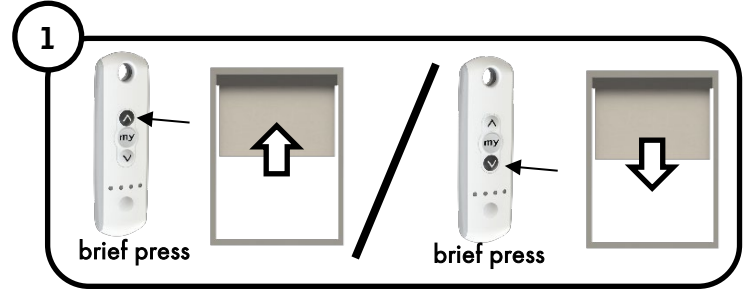
Use the **UP** or **DOWN** button on the transmitter to move the shade away from the upper and lower limits. Use the **MY** button on the transmitter to stop the shade at any position that is not the upper or lower limit.

When the shade stops, press and hold the **UP**, **DOWN** and **MY** buttons on the transmitter simultaneously until the shade jogs up and down one (1) time. The LED on the motor head will blink green five (5) times and then the LED on the motor head will blink orange slowly to confirm it is in the motor speed adjustment mode. The shade will move up and down in ten (10) second cycles.

To increase the motor speed, press and hold the **UP** button until the shade jogs up and down one (1) time and the LED on the motor head will blink green five (5) times. Repeat this step until the desired speed is reached. The maximum speed is reached when the shade jogs three (3) times up, three (3) times down and the LED on the motor head will blink red three (3) times.

To decrease the motor speed, press and hold the **DOWN** button until the shade jogs up and down one (1) time and the LED on the motor head will blink green five (5) times. Repeat this step until the desired speed is reached. The minimum speed is reached when the shade jogs three (3) times up, three (3) times down and the LED on the motor head will blink red three (3) times.

To confirm the new speed, press and hold the **MY** button on the transmitter until the shade jogs up and down one (1) time. The new speed is set and the LED on the motor head will blink green five (5) times.

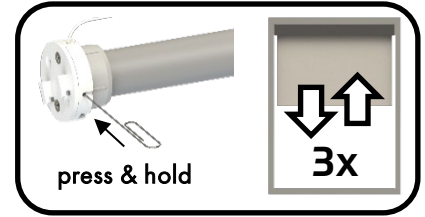


# Battery Motor Programming Instructions

## 12.0 Complete Factory Reset

### 12.1 Factory Reset Motor

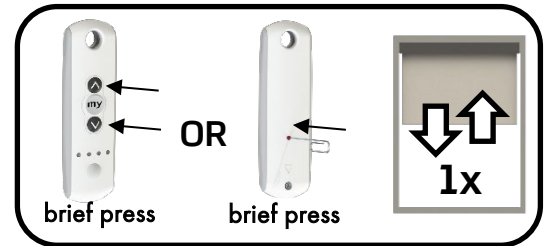
To factory reset the motor, press and hold the **PROGRAM** button on the motor head until the shade jogs up and down three (3) times. All the motor settings are erased and the LED on the motor head will blink green five (5) times.



### 12.2 Pair Transmitter

If using a multi-channel transmitter, ensure your transmitter is on the channel you wish the shade to be added before proceeding.

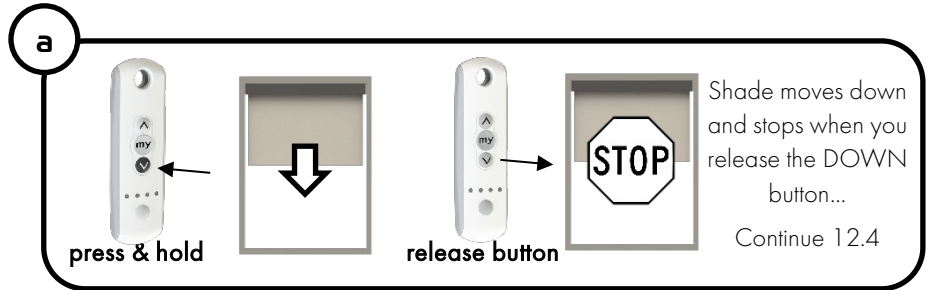
Briefly press the **PROGRAM** button on the transmitter. The shade will briefly jog up and down one (1) time. The shade is now paired with the selected channel on the transmitter.



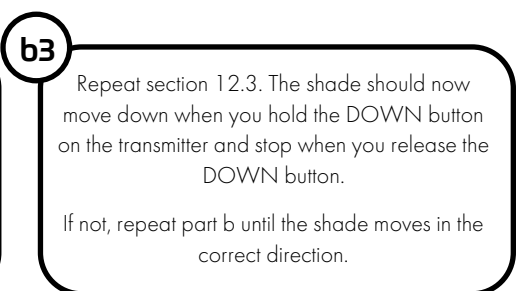
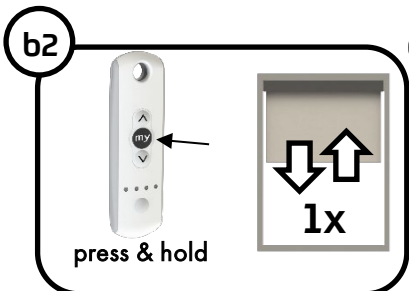
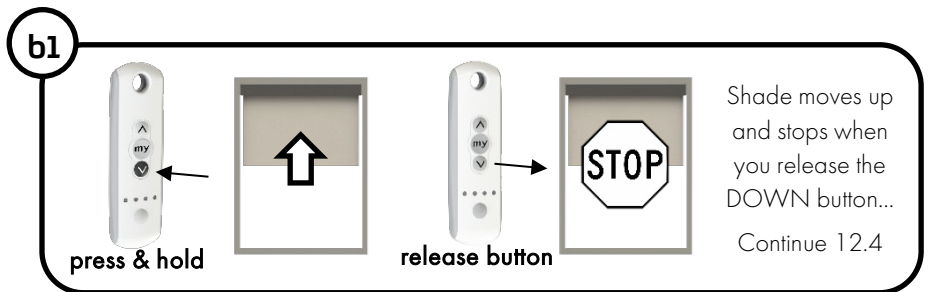
### 12.3 Check Motor Rotation

Press and hold the **DOWN** button on the transmitter.

a.) If the shade moves down while holding the **DOWN** button and stops when you release the **DOWN** button, then the motor rotation is correct, continue to section 12.4.



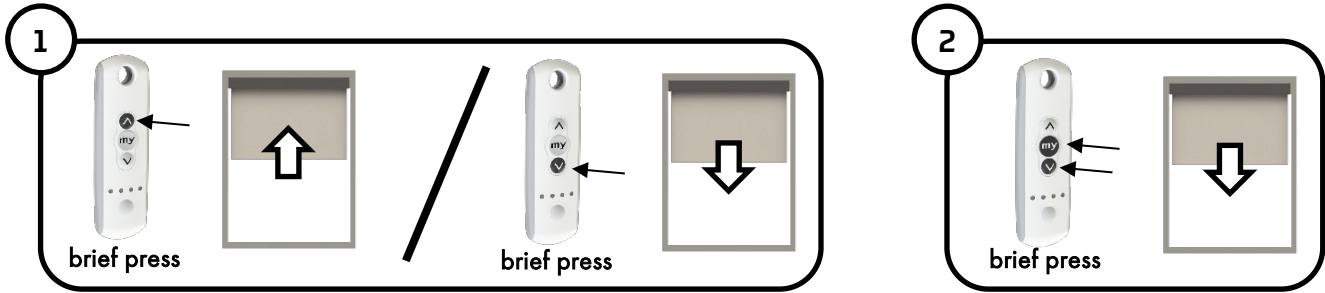
b.) If the shade moves up when you hold the **DOWN** button and stops when you release the **DOWN** button, then press and hold the **MY** button until the shade briefly jogs up and down one (1) time. Briefly press the **DOWN** button on the transmitter again to confirm the shade moves down and stops when you release the **DOWN** button. Proceed to the next step.



# Battery Motor Programming Instructions

## 12.4 Setting the Upper Limit

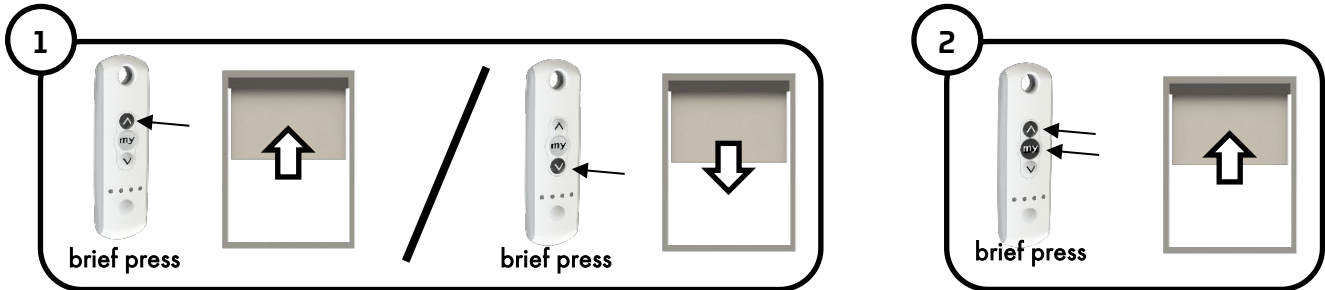
Use the UP and DOWN buttons on the transmitter to position the shade at the desired upper limit. When the desired upper limit position is reached, briefly press the MY and DOWN buttons simultaneously to memorize the upper limit position. The shade will begin to move down to the lower limit.



## 12.5 Setting the Lower Limit

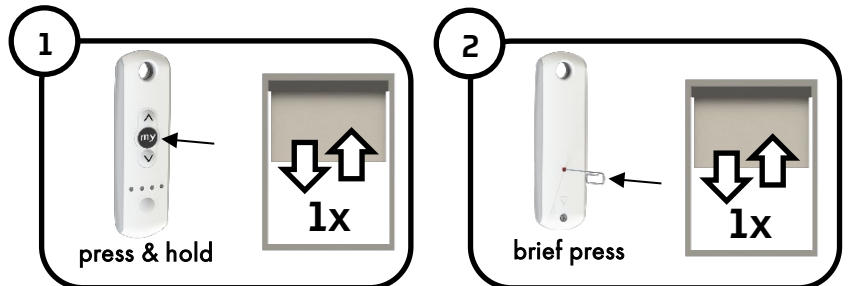
Allow the shade to continue moving down to the lower limit, if the shade passes the desired lower limit use the MY button to stop the shade and then use the UP and DOWN buttons to position the shade at the desired lower limit. Briefly press the UP and MY buttons simultaneously on the transmitter to memorize the lower limit. The shade will move back up to the upper limit that was set in the previous step.

**IMPORTANT:** Allow the shade to roll all the way up to the upper limit and stop before pressing any buttons on the transmitter.



## 12.6 Confirming the Limits

To confirm both limits, press and hold the MY button. The shade will briefly jog up and down one (1) time. To finalize and exit the limit setting program, briefly press the PROGRAM button on the back of the remote. The shade will briefly move up and down one (1) time and the LED on the motor head will blink green five (5) times.





# Battery Motor Programming Instructions

## 13.0 Troubleshooting

Observation	Possible Cause	Solution
The shade does not operate.	Motor battery is low and requires charge. Red LED blinks five (5) times when any button on a paired transmitter is pressed.	Plug in the charger.
	The transmitter battery is low. LED doesn't light when any button of a paired transmitter is pressed.	Check the battery and replace as required.
	The transmitter is not compatible or not programmed. LED does not light when any button on the transmitter is pressed.	Check the compatibility or pair the transmitter as required referring to section <b>11.0 Adding/Deleting Transmitter(s)</b> .
	An obstacle hinders the movement of the shade. The red LED on the motor head is on.	Remove the obstacle.
	Drive position is out of the end limits. The red LED on the motor head blinks two (2) times intermittently and continually.	Proceed to section <b>6.0 Adjusting End Limits</b> .
	Motor is neither set nor paired. The orange LED on the motor head is on.	Proceed to section <b>3.0 Pair Transmitter to Motor</b> .
	The thermal protection has activated. The red LED on the motor head blinks continuously.	Wait for the motor to cool down (LED will turn off).
	RTS is deactivated. LED on the motor head does not light up when any button on a paired transmitter is pressed.	Briefly press the PROGRAM button on the motor head.
The shade stops too soon.	The end limits are incorrectly set.	Reset the end limits.
	Battery is low. The red LED on the motor head blinks five (5) times when any button on a paired transmitter is pressed.	Charge the battery.
	The motor has detected an obstacle (red LED on motor head is on).	Move the shade in the opposite direction of the object.
Setting is not allowed. The drive moves briefly three (3) times in one direction and then three (3) times in the other direction. Red LED on the motor head blinks three (3) times intermittently.	Maximum number of channels have been paired to the motor. (Maximum of 12 channels can be paired to a single motor)	Refer to section <b>12.0 Adding /Deleting Transmitter(s)</b> to delete any transmitters that are not needed before adding another.
	End limits are too close.	Readjust the end limits referring to section <b>6.0 Adjusting End Limits</b> .
Red LED on the motor head blinks slowly for three (3) seconds before and after moving the shade.	Battery is low. Battery capacity is less than or equal to 5%.	Charge the battery.